

10/529762**JC17 Rec'd PCT/PTO 30 MAR 2005**AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (original) A diagnostic procedure relating to the connection of an antenna including a coil (2) or similar linked on the one hand to a reference potential and on the other hand to an output of an amplifier (4), a first capacitor (C2) being mounted in parallel with the coil (2) and a second capacitor (C3) being inserted between a terminal of the coil (2) and the reference potential, characterized in that it comprises the following steps:
 - a) transmission of a signal by the amplifier (4),
 - b) first measurement of the voltage at a terminal of the antenna during the transient state provoked by the transmission of the signal, and
 - c) second measurement of the voltage at the same terminal of the antenna in the steady state.
2. (original) The diagnostic procedure as claimed in claim 1, characterized in that it is carried out on powering up the antenna.
3. (currently amended) The diagnostic procedure as claimed in ~~one of claims~~ claim 1 [[or 2]], characterized in that the signal sent by the amplifier (4) is not modulated.
4. (original) The diagnostic procedure as claimed in claim 3, characterized in that the signal at the amplifier (4) output presents a rise time, followed by a pulse duration and finally a fall time.

5. (currently amended) The diagnostic procedure as claimed in claim 4, characterized in that the first measurement is carried out during the rise time, ~~for example in the second half of the signal rise.~~
6. (currently amended) The diagnostic procedure as claimed in ~~one of claims~~ claim 4 [[or 5]], characterized in that the second measurement is carried out during the pulse duration.
7. (currently amended) The diagnostic procedure as claimed in ~~one of claims~~ claim 1 [[to 6]], characterized in that the antenna is connected to an input stage of a multiplexer and in that a resistor (R2) positioned between the antenna and the input stage of the multiplexer limits the current in the multiplexer input stage.
8. (new) The diagnostic procedure of claim 5, wherein the first measurement is carried out during a second half of the signal rise.
9. (new) The diagnostic procedure as claimed in claim 2, characterized in that the signal sent by the amplifier (4) is not modulated.
10. (new) The diagnostic procedure as claimed in claim 5, characterized in that the second measurement is carried out during the pulse duration.
11. (new) The diagnostic procedure as claimed in claim 2, characterized in that the antenna is connected to an input stage of a multiplexer and in that a resistor (R2)

positioned between the antenna and the input stage of the multiplexer limits the current in the multiplexer input stage.

12. (new) The diagnostic procedure as claimed in claim 3, characterized in that the antenna is connected to an input stage of a multiplexer and in that a resistor (R2) positioned between the antenna and the input stage of the multiplexer limits the current in the multiplexer input stage.
13. (new) The diagnostic procedure as claimed in claim 4, characterized in that the antenna is connected to an input stage of a multiplexer and in that a resistor (R2) positioned between the antenna and the input stage of the multiplexer limits the current in the multiplexer input stage.
14. (new) The diagnostic procedure as claimed in claim 5, characterized in that the antenna is connected to an input stage of a multiplexer and in that a resistor (R2) positioned between the antenna and the input stage of the multiplexer limits the current in the multiplexer input stage.
15. (new) The diagnostic procedure as claimed in claim 6, characterized in that the antenna is connected to an input stage of a multiplexer and in that a resistor (R2) positioned between the antenna and the input stage of the multiplexer limits the current in the multiplexer input stage.